

SEP 26 1972

Copy sent to SRO

HOFFMAN-TAFF INC. a subsidiary of SYNTEX laboratories, inc.

September 21, 1972

Missouri Clean Water Commission
Department of Public Health and Welfare
Room 102, State Capitol Bldg.
P. O. Box 154
Jefferson City, Mo. 65101



40038737
SUPERFUND RECORDS

Attention: Mr. James P. Odendahl, P. E.

Dear Mr. Odendahl:

The following is in answer to your phone request of September 5, 1972 concerning our action regarding the polluted condition of the Spring River beginning in an area approximately one mile north of our plant boundary. This condition was reported to our Verona Plant Manager on the morning of September 5 and was described as a Sphaerotilus type growth apparent in the Spring River beginning at a point just downstream of the junction of the river and the creek flowing through our plant site.

This condition was immediately investigated by Rick Bagby, Ron Riggs, Larry Lyons, and other Verona plant personnel as well as Bill Glasgow and myself. This investigation revealed that algae growth was present throughout the creek from its junction with the Spring River to a point within the boundary of our plant site. Some conditions which may have contributed to this growth are as follows:

1. The effluent from our pilot trickling filter was temporarily diverted to the #4 lagoon on Sept. 1 due to a mechanical failure of the effluent pump. This lagoon is unlined and material may have entered the creek through leaching.
2. Production in the Verona plant was curtailed during the Labor Day weekend resulting in abnormally low hydraulic flow to the creek. (No natural flow is noted in this creek during dry weather).
3. Weather conditions during this week-end were dry and considerably cooler (70° vs 90°).
4. The low hydraulic flow may have resulted in a temperature rise in the creek due to boiler blowdown.

49/7 53350

Sept. 21, 1972
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Missouri Clean Water Commission

To eliminate possible contamination sources, the following action was taken:

1. Pumping of the #4 lagoon was begun on Sept. 5 and completed on Sept. 6.
2. The trickling filter effluent was diverted to the irrigation site on Sept. 5 and an emergency pump has since been installed to act as a back up in the event of mechanical failure.
3. Samples have been taken of the creek (see attachment) in order to isolate points of contamination..
4. An engineering study is being made relative to lining and modification of the #4 lagoon to serve as an emergency reservoir.
5. Management has been consulted concerning the possibility of diverting all plant effluent from the creek and discharging this water via a lined lagoon directly to the river. This proposal would be in conjunction with item 4.
6. A study has begun on the analysis of the individual streams discharging to the creek with the idea of diverting some of these to our waste treatment system. This study is to be completed by Oct. 15, 1972.

100 9PM

As indicated above, it is difficult to positively determine if any single factor caused this growth as several conditions changed during this period. However, in addition to the points previously mentioned we will maintain closer scrutiny of conditions in this creek as well as the Spring River.

We appreciate your promptly notifying us of this problem. You can be assured that we have taken corrective action and are actively working toward eliminating conditions that might contribute to such in the future.

Sincerely,

HOFFMAN-TAFF, INC.

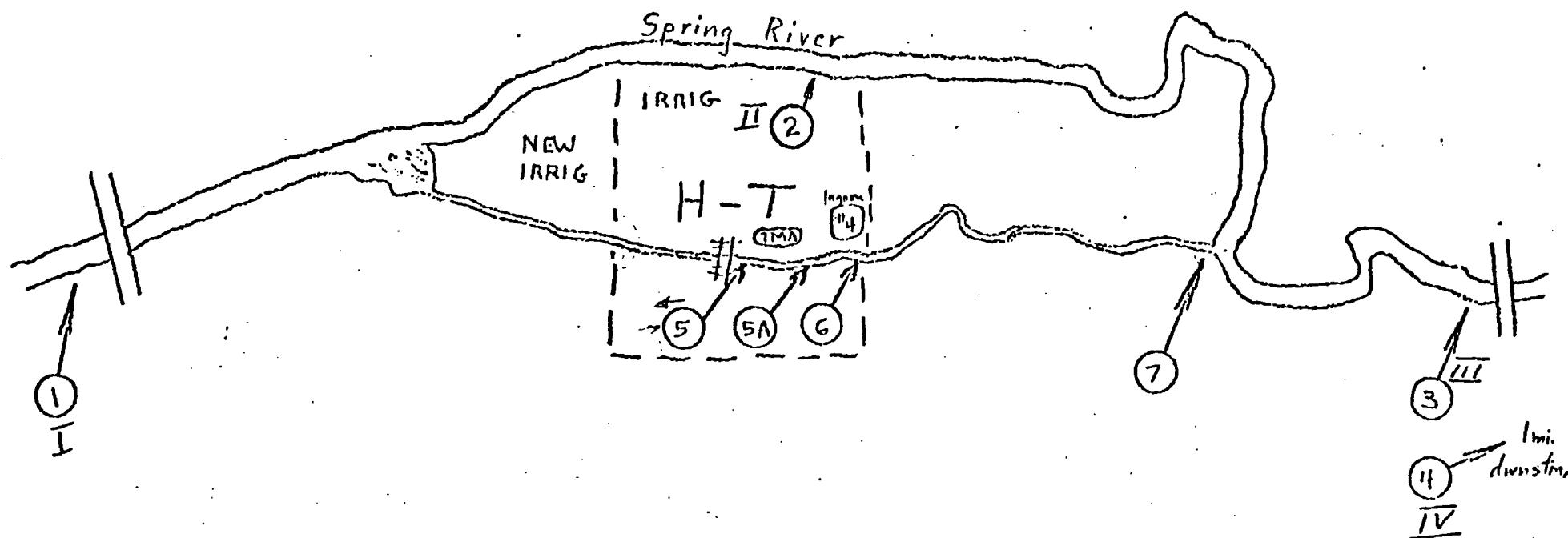
Gene Wallace
C. E. (Gene) Wallace
Chief Engineer &
Pollution Coordinator

Attachments

cc: Rick Bagby
Earl Barkley
Bill Glasgow
Larry Lyons
Godfrey Moll
J. E. Rundell

From: Gene Wallace
Item 4: 100 9PM.

Verona River - Ditch Analysis Points 9-13-72



Sample Point	Dissolved O ₂ mg/lit	Temp °C	Time Taken
1	8.0	20.0	9:00 am
2	8.3	22.5	11:10
3	6.6	21.5	9:20
4	7.8	24.5	10:00
5	7.0	34.0	10:30
5A	6.0	33.5	10:45
6	3.5	33.5	11:00
7	2.8	22.5	9:40

On 14-9-72

TOTAL
HAZARDOUS
ALK.

TOTAL
ACID.

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BCD ppm	TOTAL (5 day)	
												pH	
9-14-72	1 I					0	0	178	136	3.5	0	7.91	
9-14-72	2 II					0	0	172	148	1.2	0	9.20	
9-14-72	3 III					3.6	0	189	155	3.5	1.2	7.89	
9-14-72	4 IV					0	0	170	140	2.0	0	8.10	
9-14-72	5					45	0	150	164	0	6.0	8.76	
9-14-72	5A					48.6	0	152	180	0	6.0	8.76	
9-14-72	6					48.6	0	156	198	0	8.0	8.64	
9-14-72	7	# Leachings FROM # 4 LAGOON				486	65	410	330	16	70	7.52	

1	Spring River at upstream bridge (PT #1)
2	Spring River below irrigation area (PT #2)
3	Spring River below ditch entry (PT #3)
4	Spring River downstream (PT #4)
5	Drainage ditch above TMA tank
5A	Drainage ditch above #4 lagoon
6	Drainage ditch at fence
7	Drainage ditch before river entry

Karl F. Fackler
9-19-72

AUG. 9 & 16, 1972

K. Fahlberg

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
8-9-72	B					41	35	170	184	0	34	8.39
8-9-72	C											
8-9-72	E					10,200	6,400	800	1,146	78	9,500	8.02
8-9-72	I	8.4			19°	0	0	170	150	3.5	0	7.93
8-9-72	II	7.4			19°	0	0	168	146	3.5	0	8.00
8-9-72	III	5.7			19.3°	0	5	172	154	3.9	0	7.90
8-9-72	IV	6.6			21°	0	5	167	146	2.7	0	8.08
8-16-72	B											/
8-16-72	C											
8-16-72	E											
8-16-72	I	6.5			22.0	16	0	190	139	1.6	3.0	8.03
8-16-72	II	8.2			23.2	19	0	178	148	2.0	3.5	7.95
8-16-72	III	6.6			23.0	16	0	180	152	2.3	3.0	7.94
8-16-72	IV	6.9			26.0	25	0	169	141	2.0	1.0	7.98

JULY 26 + AUG. 2, 1972

RRD.

U.K. Faehling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
7-26-72	B					5,100	2,750	92	134	0	3,250	9.10
7-26-72	C					-	-	-	-	-	-	-
7-26-72	E					6,600	2,500	300	431	66	6,000	7.69
7-26-72	I	6.8		22.3								
7-26-72	II	7.3		23.0								
7-26-72	III	5.6		24.0								
7-26-72	IV	5.4		26.0								
8-2-72	B					64	35	126	171	0	48	8.98
8-2-72	C					-	-	-	-	-	-	-
8-2-72	E					4,040	2,100	350	568	47	4,000	7.92
8-2-72	I	9.1		25.5	5.5	0	175	148	3.5	1.5		7.99
8-2-72	II	8.1		23.0	5.5	0	166	143	3.1	2.0		8.00
8-2-72	III	5.4		24.0	33	0	186	160	2.0	7.0		7.73
8-2-72	IV	8.7		27.5	42	0	170	140	2.0	0		8.07

JULY 12 & 19 1972

RRD

K. Fall

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
7-12-72	B											
7-12-72	C											
7-12-72	E											
7-12-72	I	7.7	22.5	3.8	0	170	134	3.9	0	8.00		
7-12-72	II	8.2	23.5	7.6	0	162	144	3.1	0.5	7.99		
7-12-72	III	7.1	23.0	3.8	0	167	146	3.5	0	7.92		
7-12-72	IV	9.0	26.0	3.8	0	168	136	2.0	0	8.23		
7-19-72	B					47	15	121	165	0	20	8.98
7-19-72	C	SUMP				—	—	—	—	—	—	—
7-19-72	E					6,700	3,000	320	191	72	6,500	7.15
7-19-72	I	7.9	25.5	0	0	168	147	3.3	0	7.95		
7-19-72	II	8.7	26.5	3.8	0	170	146	2.1	2.0	8.00		
7-19-72	III	5.7	25.5	11.3	0	172	152	7.8	—	7.71		
7-19-72	IV	8.9	29.1	1.9	0	170	141	0.8	—	8.21		

JUNE 28 + JULY 5, 1972

Y. Fakih

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	VTH ppm	TA ppm	FMA ppm	BOD ppm	pH
6-28-72	B											
6-28-72	C											
6-28-72	E											
6-28-72	I					7.9	0	170	153	8.0	-	7.78
6-28-72	II					0	0	172	154	8.4	-	7.87
6-28-72	III					0	0	161	150	10	-	7.70
6-28-72	IV					15.9	0	164	142	8.0	-	7.94
7-5-72	B					35	28	158	168	0	30	9.75
7-5-72	C											
7-5-72	E					10,200	7,500	580 580	88 77	179	8,000	5.40
7-5-72	I					3.9	0	169	148	2.0	0.1	8.06
7-5-72	II					2.0	0	164	146	1.6	0	8.08
7-5-72	III					11.8	0	165	146	2.3	0	8.04
7-5-72	IV					7.8	0	157	148	0	2.5	8.32

NOT RECEIVED

JUNE 14 + 21, 1972

K. Faubling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
6-14-72	B	7.9	28	8.2 9.1	Clear	117	65	158	168	0	74	8.76
6-14-72	C				No Sample							
6-14-72	E					13,000	9,700	640	346	70	10,400	7.33
6-14-72	I	8.3			19°	3.7	0	166	146	3.5	0	7.90
6-14-72	II	8.0			20°	3.7	0	168	147	3.9	0	7.90
6-14-72	III	8.0			21°	5.6	0	160	148	2.0	0	8.06
6-14-72	IV	7.8			25°	1.9	0	161	139	2.0	0	8.01
6-21-72	B	7.7	5.2	29	41°	31	982	465	160	184	0	- 8.73
6-21-72	C				No Sample							
6-21-72	E	7.4	2.2	26	.1	27°	11,200	7,500	1080	105	90	- 6.75
6-21-72	I	8.1			18°	0	0	170	150	2.3	-	7.80
6-21-72	II	8.0			18°	5.4	0	160	150	2.0	-	7.85
6-21-72	III	7.8			21°	0	0	161	138	1.6	-	7.70
6-21-72	IV	7.9			21°	20	0	160	138	2.0	-	7.90

MAY 31 - JUNE 7, 1972

K. Fulling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
5-31-72	B					24,500	16,000	540	212	123	-	6.30
5-31-72	C											
5-31-72	E					11,700	5,500	590	346	55	-	7.50
5-31-72	I											
5-31-72	II											
5-31-72	III											
5-31-72	IV											
6-7-72	B	8.8	54	³² clear	34							
6-7-72	C	4.7	9.0	²¹ clear	20							
6-7-72	E	7.1	9.6	²³ clear	23							
6-7-72	I	7.1		19	3.8	0	160	140	2.9	-	7.80	
6-7-72	II	8.7		19	5.7	0	162	143	2.3	-	7.85	
6-7-72	III	8.8		19	0	0	160	142	2.5	-	7.60	
6-7-72	IV	8.4		19	1.9	0	170	139	2.0	-	8.02	

MAY 17-24 '72

K. Suhling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
5-17-72	B	7.8	8.6	20 clear	20°	7						1
5-17-72	C	6.3	8.4	17° 1.144	16°	3						samples not received.
5-17-72	E	7.9	8.6	1	23°	3						
5-24-72	I		9.8		17°	0	0	140	140	2.1	0	7.88
5-24-72	II		9.6		17°	0	0	150	138	1.6	0	8.09
5-24-72	III		8.6		17°	1.9	0	149	132	2.3	0	7.65
5-24-72	IV		8.9		17°	11.5	0	150	133	2.0	0.1	7.98
5-24-72	B	9.5	6.0	0.2	42	88	80	180	188	0	45	8.30
5-24-72	C											
5-24-72	E	7.3	6.2	0.5	24	10,500	7,500	564	400	57	10,000	7.70
5-24-72	I	9.6			16°	3.8	0	157	121	2.1	0	7.85
5-24-72	II	9.0			16°	5.8	0	157	131	2.0	0	7.95
5-24-72	III	9.0			18°	1.9	0	157	132	1.8	0	7.85
5-24-72	IV	9.2			20°	7.7	0	160	135	1.6	0	7.85

MAY 3 + 10, 1972

K. Fackler

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
5-3-72	B	7.7	24.9	clear	26	51	40	191	173	8.0	48	7.69
5-3-72	C	6.9	2.4	.5	17							
5-3-72	E	8.4	5.2	.3	20	15,000	11,000	620	754	0	15,000	8.33
5-3-72	I		13.0		18°C	9.8	0	140	116	2.9	2.5	7.80
5-3-72	II		12.8		18°C	0	0	130	100	3.5	0	7.72
5-3-72	III		12.6		18°C	5.9	0	130	110	2.7	1.5	7.90
5-3-72	IV		12.7		18°C	2.0	0	130	107	2.1	1.0	7.95
5-10-72	B	7.9	4.8	24 clear	25°	33.5	30	175	186	4.3	30	8.02
5-10-72	C	5.8	8.2	17 .5	16°							
5-10-72	E	7.7	7.4	23 .3	25°	17,100	9,700	460	677	91	17,100	7.90
5-10-72	I		11.0		13°	2.0	<5	135	121	2.3	2.0	8.09
5-10-72	II		10.8		13°	3.9	<5	137	122	1.9	0.5	8.02
5-10-72	III		11.0		13	3.9	<5	140	124	1.6	0	8.10
5-10-72	IV		12.8		13	9.8	<5	140	126	1.6	0	8.20

APRIL 19 & 26, 1972

K. Faehling

DATE	Sample Point	pH	DO ppm	SS ml/l	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	TMA ppm	BOD ppm	pH
4-19-72	B	8.0	5.3	LITTLE	18	635	355	224	210	3.9	280	8.18
4-19-72	E	7.2	6.5	.05	19	19,100	10,200	520	802	63	17,200	7.95
4-19-72	I		12.3		17	10.2	0	158	141	3.5	2.5	7.95
4-19-72	II		12.0		17	8.5	0	160	146	2.1	0	7.95
4-19-72	III		12.0		17	13.6	0	150	152	2.0	4.0	8.00
4-19-72	IV		11.6		17	10.0	0	150	140	2.0	4.5	8.00
4-26-72	B	7.4	5.0	²² clear	24°	34	27	178	198	3.9	25	8.08
4-26-72	E	9.5	8.4	¹⁹ 1.	21°	15,600	9,700	320	1,522	0	10,700	9.02
	C	4.3	6.4	LITTLE	16°							
4-26-72	I		12.4		14°	5.9	2	140	120	2.1	0	8.00
4-26-72	II		12.0		14°	2.0	2	132	119	2.0	0.5	7.93
4-26-72	III		12.1		19°	2.0	2	138	116	1.9	0.5	8.00
4-26-72	IV		13.2		15°	11.8	2	140	119	2.0	0	8.02

MARCH 27 & 30, 1972

K. Faßburg

15 + 11b

VANUATU WATER ANIMALS

MARCH ~~22+29~~, '72

47

MARCH 8, 1972

K. Failling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
3-6-72	B	8.9	3.7	above	23							
3-6-72	C	6.8	9.8	"	12							
3-6-72	E	8.2	3.5	.1	13							
3-8-72	B					306	230	143	224	0	150	9.12
3-8-72	E					20,200	10,500	940	1,278	148	15,000	7.50
3-8-72	S.R. ABOVE H.T.	10.6			10°C	0	0	160	137	2.3	0	7.88
3-8-72	S.R. AT H.T. PROPERTY LINE	10.4			10°C	0	0	150	138	2.7	0	8.04
3-8-72	S.R. 1 MILE BELOW H.T.	10.2			10°C	0	0	165	143	3.9	0	7.93
3-8-72	S.R. 2 MILES BELOW H.T.	10.3			10°C	0	0	160	136	2.0	0	8.00

FEB. 28 - MAR. 2 '72

K. Fulling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TN ppm	TA ppm	FMA ppm	BOD ppm	pH
2-28-72	B	8.6	5.5 ²³	144	26							
2-28-72	C	6.8	9 ¹⁸	1.2	10							
2-28-72	E	6.6	3.6 ¹¹⁵	.5	10							
3-2-72	B											
3-2-72	C											
3-2-72	E											
3-1-72	S.R. ABOVE H.T.	8.4			15°	0	0	165	142	3.5		7.76
3-1-72	S.R. AT H.T. PROPERTY LINE	8.0			19°	0	0	160	144	2.0		7.82
3-1-72	S.R. 1 MILE BELOW H.T.	8.2			14°	0	0	164	144	3.9		7.80
3-1-72	S.R. 2 MILES BELOW H.T.	8.4			19°	0	0	162	137	3.9		7.90

K. Felling

Feb. 14-17, '72

Feb. 7-10, '72

K. Feller

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TK ppm	TA ppm	FKA ppm	BOD ppm	pH
2-7-72	B	8.8	6.8	.3	15°	375	291	40	154	0	80	9.11
2-7-72	C	3.8	4.7	.2	4°	16,300	11,800	924	0	1004	-	4.50
2-7-72	E	7.2	9.9	.4	2°	18,100	11,000	940	687	64	18,000	7.70
2-10-72	B	8.9	6.3	27	4.44	30						
2-10-72	C	6.9	9.1	"	.5	10						Samples not received.
2-10-72	E	9.5	10.2	?	1.0	5						
2-9-72	S.R. ABOVE H.T.		11.0		7°C	3.9	0	172	137	2.3	4.0	7.85
2-9-72	S.R. AT H.T. Property Line		16.2	6.5	6°C	3.9	0	155	138	1.9	1.0	7.89
2-9-72	S.R. 1 mile Below H.T.		10.4		6°C	9.6	0	167	138	1.8	4.5	7.90
2-9-72	S.R. 2 miles Below H.T.		12.2		6°C	9.6	0	160	139	2.5	2.5	7.89

JAN. 31 - FEB. 3, '72

K. Falling

DATE	Sample Point	pH	DO ppm	SS ml/l.	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
1-31-72	B					94	75	146	205	9.4		7.80
1-31-72	C					19,300	9,300	1,020	166	441	—	4.85
1-31-72	E					24,200	13,500	590	1,137	0		8.64
2-3-72	B											
2-3-72	C											
2-3-72	E											
2-2-72	S.R. ABOVE H.T.											
2-2-72	S.R. AT H.T. PROPERTY LINE											
2-2-72	S.R. 1 MILE BELOW H.T.											
2-2-72	S.R. 2 MILES BELOW H.T.											

Samples not received.

Samples not received.

JAN. 24-27 '72

K. Faelling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
1-24-72	B	8.3	1.9	.2	15	64	43	110	194	2.0	62	8.14
1-24-72	C	6.9	2.6	.1	10	3,500	1,800	280	266	66	-	6.99
1-24-72	E	7.6	3.9	4.5	7	21,000	11,800	500	566	81	16,800	7.50
1-27-72	B	7.7	2.5		18°							
1-27-72	C	7.9	1.3	.4	13							Samplers not received -
1-27-72	E	8.7	8.2	2.5	6							
1-26-72	S.R. ABOVE H.T.		11.0		9°C	0	0	150	132	3.5	1.0	7.91
1-26-72	S.R. AT H.T. PROPERTY LINE		10.6		7°C	0	0	150	130	2.1	1.0	7.95
1-26-72	S.R. 1 MILE BELOW H.T.		11.8		6°C	0	0	150	132	3.9	5.5	7.93
1-26-72	S.R. 2 MILES BELOW H.T.		11.9		6°C	0	0	150	132	2.9	1.0	7.92

JAN. 17-20, '72

K. Farkling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TB rpm	TA ppm	FMA ppm	BOD ppm	pH
1-17-72	B											
1-17-72	C											
1-17-72	E											
1-20-72	B	8.3	3.8	4.46	18°	122	105	150	180	0	60	8.60
1-20-72	C	9.4	9.5	.2	13°	47,200	23,000	600	72	675	—	4.60
1-20-72	E	7.3	7.8	.4	12°	22,600	7,500	580	366	72	21,500	7.30
1-19-72	S.R. Above	9.2			13°	3.7	0	160	130	2.0	3.0	8.05
1-19-72	S.R. Below											
1-19-72	S.R. - up Below	11.1			12°	13.0	0	152	132	2.0	5.0	8.10

JAN. 10-13 '72

K. Failling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	HOD ppm	pH
1-10-72	E	7.2	2.8	.01	13	70	30	170	180	3.1	70	7.60
1-10-72	C	5.4	2.6	.1	8	12,900	7,500	670	228	261	-	5.82
1-10-72	E	7.1	4.2	.4	5	18,900	10,200	620	448	69	17,100	7.54
1-13-72	E					111	65	200	200	7.8	80	7.80
1-13-72	C					22,400	12,200	1,200	360	324	-	5.35
1-13-72	E					20,200	10,200	1,000	504	68	11,700	7.70
		7.4	3.2	.02	14							
		4.4	5.4	.04	13							
		7.3	8.3	1.5	9							
1-12-72	S.R. Above		10.4		10°C	20.8	0	155	126	4.9	2.0	7.89
1-12-72	S.R. Below		10.0		10°C	28.3	0	152	131	2.3	7.5	7.90
1-12-72	S.R. 1 m Below		11.2		9°C	13.2	0	150	128	2.0	0.5	8.02

JAN. 3-6, '72

Karl Fackling

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	BOD ppm	pH
1-3-72	E	7.2	6.8	13 Clear	12	36	24	189	163	3.9	36	7.70
1-3-72	C	6.6	8.2	15 Little	12	13,000	7,800	536	456	192	—	6.56
1-3-72	E	7.7	9.4	13 Little	12	13,200	8,500	640	396	46	8,600	7.60
1-6-72	E	7.3	6.5	13 Slight	11	66	30	168	178	9.0	57	7.70
1-6-72	C	8.7	9.9	12 75	10	14,000	7,600	636	454	0	—	8.70
1-6-72	E	8.2	9.9	12 .4	10	18,100	10,000	624	422	70	10,800	7.81
1-5-72	S.R. Above		13.6		6°C	5.8	0	130	116	5.1	3.0	7.60
1-5-72	S.R. Below		12.6		5°C	1.9	0	150	123	3.9	2.0	7.55
1-5-72	S.R. 1 m Below		14.5		4°C	1.9	0	160	119	3.1	2.0	7.81

APRIL 5+12, 1972

K. Faulkner

DATE	Sample Point	pH	DO ppm	SS ml/L	Temp °C	COD ppm	ODI ppm	TH ppm	TA ppm	FMA ppm	EOD ppm	pH
4-5-72	B	7.8	9.1 ²¹	clear	24	106	40	168	176	3.5	100	8.18
4-5-72	E	8.1	2.5 ³	<1110	12	20,000	8,000	560	980	20	20,000	8.02
4-5-72	S.R. ABOVE H.T.	12.8			19°	0	0	166	143	2.1	0	8.00
4-5-72	S.R. AT H.T. PROPERTY LINE	12.9			19°	0	0	165	142	3.5	0	7.99
4-5-72	S.R. 1 MILE BELOW H.T.	12.6			19°	0	0	170	138	1.6	0	8.09
4-5-72	S.R. 2 MILES BELOW H.T.	13.2			19°	0	0	160	136	1.4	0	8.10
4-12-72	B	10.1	5.2 ²⁵	1.	23	72,100	55,000	800	520	21	11,000	7.38
4-12-72	E	7.0	5.8 ¹²	1.5	14	28,400	23,300	260	1010	138	19,800	7.77
					19							
					7.7	1.2	1.	17				
4-12-72	S.R. ABOVE H.T.	12.6			18°	0	0	160	150	2.0	0	7.95
4-12-72	S.R. AT H.T. PROPERTY LINE	12.2			18°	1.7	0	160	148	2.3	0	7.98
4-12-72	S.R. 1 MILE BELOW H.T.	12.3			19°	8.6	0	150	140	2.7	2.0	8.01
4-12-72	S.R. 2 MILES BELOW H.T.	12.0			20°	0	0	148	138	1.6	0	8.02